



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: U.S. COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 4459
Alexandria, Virginia 22303-4459
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10 038,714	01 02 2002	Shiback Nam	M-11590 US	8922

7590 05 21 2003

SKJERVEN MORRILL MACPHERSON LLP
Three Embarcadero Center, 28th Floor
San Francisco, CA 94111

EXAMINER

GREENE, PERSHELLE L

ART UNIT PAPER NUMBER

2826

DATE MAILED: 05 21 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,714

Applicant(s)

NAM ET AL.

Examiner

Pershelle Greene

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) 1-22 and 37-60 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 23-26 and 30-33 is/are rejected.
- 7) ☐ Claim(s) 27-29 and 34-36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO 890)
- 4) ☐ Interview Summary (PTO 412) Paper Notes

Application Control Number: 10 038,714

Page 2

Art Unit: 2826

Serial Number: 10 038714

Attorney's Docket #: M-11590 US

Filing Date: 01/02/2002

Applicant: Nam et al.

Examiner: Pershelle Greene

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Figure 3 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that figures 1, 2, 3 and 4 are not patentable distinct species. This is not found persuasive because the adhesive of figure 2 can be claimed separately from the species of figure 1. However, the examiner does agree that figures 3 and 4 are not patentable distinct, therefor claims 23-36 will be examined. Claims 49-60 will not be examined because they are method claims and have already been withdrawn from consideration in Paper No. 4.

The requirement is still deemed proper and is therefore made FINAL.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

basis for the rejections under this section made in this Office action:

Art Unit: 2826

A person shall be entitled to a patent unless

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 23-26 and 30-33 are being rejected under 35 U.S.C. 102(e) as being anticipated by Martinez et al. (U.S. Patent # 6,184,585).

As to claim 23, Martinez et al. discloses a co-packaged MOS-gated device and control integrated circuit having all of the claimed subject matter:

A. "a lead frame" is met by the lead frame 40. Refer to figure 3;

B. "a first integrated circuit chip ... of the first integrated circuit chip" is met by the first integrated circuit chip Q2 attached to a top surface of the lead frame 40 by a conductive adhesive 42, wherein the first integrated circuit chip Q2 does not have a passivation layer on a top surface of the first integrated circuit chip Q2; and

C. "a second integrated circuit chip ... by an insulation epoxy adhesive" is met the

... by an insulation epoxy adhesive 44 attached to a top surface of the first

As to claim 24, Martinez et al. shows the first integrated circuit chip comprising a switching device.

As to claim 25, Martinez et al. shows the second integrated circuit chip comprising a control device.

As to claim 26, Martinez et al. shows the conductive adhesive comprising solder.

As to claim 30, Martinez et al. discloses a co-packaged MOS-gated device and control integrated circuit having all of the claimed subject matter:

- A. "a lead frame" is met by the lead frame 40; Refer to figure 3
- B. "a switching device ... on a top surface of the switching device" is met by the is met by the switching device Q2 attached to a top surface of the lead frame 40 by a conductive adhesive 42, wherein the switching device Q2 does not have a passivation layer on a top surface of the switching device Q2; and
- C. "a driving device ... by an insulation epoxy adhesive" is met the driving device 16 directly attached to the top surface of the switching device Q2 by an insulation epoxy adhesive.

As to claim 31, Martinez et al. shows a switching device comprising a transistor chip.

As to claim 32, Martinez et al. shows a driving device comprising a control integrated circuit chip.

As to claim 33, Martinez et al. shows a conductive adhesive comprising solder.

Art Unit: 2826

Claim Objections

5. Claims 27-29 and 34-36 are being objected to as being dependent upon a rejected base claim.

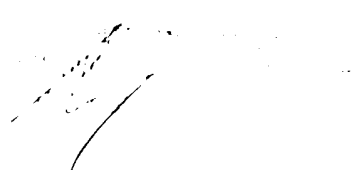
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pershelle Greene whose telephone number is 703-305-3870. The examiner can normally be reached on M-F 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 703-308-6601. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

PLG
May 16, 2003

A handwritten signature, likely of the examiner Pershelle Greene, is written in dark ink. The signature is stylized and appears to be 'P. Greene'.